



Indassol

ON INSTRUCTIONS OF NORTHERN MONK BREWERY DUE TO CAPACITY EXPANSION

FOR SALE

**30 BARREL GRAVITY SYSTEMS BREW HOUSE,
COMMISSIONED APRIL 2017**

LOCATION: LEEDS, UK



FEATURED ITEMS:

Item 1: Mash Tun

Constructed from 304 grade stainless steel with a 2B finish to the following design:

- Inside diameter 2300mm
- Outside diameter 2412mm
- Shell height 1775mm
- Outlet height 1204mm
- Insulated with 50mm mineral wool on shell
- Top of vessel flat with fixed centre section, 1 half hinged lid and 2 quarter removable lids
- Bottom of vessel sloped to 4 outlets
- Cladding all welded stainless steel
- Inside welds ground to 180 grit, outside vertical welds ground to 180 grit and strip polished circumferential welds left as laid pickled and passivated
- Central driven mash removal arm complete with scraper blade running at 10 rpm, variable speed
- False bottom of wedge wire providing a 0.7mm maximum gap
- Support ring and bars for the wedge wire floor suitable for removal via the manway door.
- Boss for temperature transmitter pocket on shell of vessel
- 1.5" CIP feed line complete with 2 off CIP spray balls on 'tee piece'
- Rotating sparge arm
- Top connection for Hydrator
- Rectangular side manway with mash removal safety interlock switch
- Safety discharge chute/guard for side man way
- Recirculation connections
- Guard rail around top of vessel to prevent against falls and ladder rings on inside wall for safe access



Item 2: Grist

Grist Case with opening size 160cm x160cm x 120cm.

Designed for pre-milled malt purchased in bags and hand tipped into a bulk grist hopper. Would work as part of bulk grain milling system. Designed for a maximum of 2000kg of malt used for a single brew to the following outline grist hopper & transfer conveyor specification:

- 4m³ capacity floor standing stainless steel bulk grist hopper
- 1x Opening for manual loading via the top
- 1x Top hopper cover lid
- 1x Bespoke bottom outlet connection with transition connection to the conveyor feed
- 1x 6"bore flexi-screw conveyor with variable speed drive to control the transfer rate into the mash tun hydrator.
- 1x Inlet slide valve for grain flow control into the conveyor
- 1x Stainless steel structure connected to the mash tun to support the drive end of the grist conveyor



Item 3: Kettle/Whirlpool

Designed, manufactured, and certified by TUV and constructed from 304 grade stainless steel with a 2B finish to the following design:

- Inside diameter 2050mm
- Outside diameter 2160mm
- Shell height 2000mm
- Height under outlet 540mm
- Insulation with 50mm mineral wool on shell and bottom
- Top of vessel conical 15 degrees
- Bottom of vessel conical 15 degrees
- Individual heating jackets on shell of vessel and base
- BSP connections for steam
- Manway door in the side near bottom of shell
- 3" central drain outlet used for pelleted hop removal
- Second outlet to the edge of the bottom cone
- Inside welds ground to 180 grit, outside vertical welds ground to 180 grit and circumferential welds left as laid pickled and passivated
- Top mounted manway
- Boss for temperature transmitter pocket on shell of vessel
- 154mm vent for connection of a vent line to the outside (not part of Copper supply)
- 2 off CIP spray balls on 'tee piece'
- 1off 1.5" top mounted Wort inlet
- 1.5" tangential inlet/recirculation inlet, optionally piped through the heat exchanger to allow for temperature reduction.
- Connection on shell for future sample point
- Level sight glass

Item 4: Wort Cooler

Designed to cool 30 barrels of wort from 100C to 20C by 6,240 l/h of cold liquor at 15C rising to 77C in 1 hour with alternative duties to cool wort to 12C by cold liquor at 8C. The cooler is mounted on a stainless steel box section frame with adjustable feet.

Item 5: Stainless Steel Control panel for BrewHouse

Item 6: 8,000 litre Cold Liquor Tank

Designed, manufactured and certified by TUV and constructed from 304 grade stainless steel with a 2B finish to the following design Cooling jacket on side wall in 2 sections:

- Cooling jacket designed to operate at 2 bar
- Insulation with 50mm mineral wool on shell
- 15 degree cone top
- 15 degree cone bottom
- Fully welded outer casing
- Inside welds ground to 180 grit, outside vertical welds ground to 180 grit and circumferential welds left as laid and pickled and passivated
- Manway mounted in top
- 1.5" top mounted inlet
- 1.5" bottom outlet
- 250mm top mounted vent
- 1" side entry ball float
- 2" overflow pipe to ground level
- 1.5" CIP feed line to top of tank including spray ball and inlet pipe
- Boss for temperature transmitter pocket on shell of tank
- Level sight glass



Item 7: 13,500 Litre Hot Liquor Tank

- Insulated & channel jacketed water heated tank 250mm top mounted vent
- Temp 95 Degrees 2" overflow pipe to ground level
- 15 degree top & bottom cone
- 50mm Mineral wool insulation
- Flow rate 8.5m³/h
- Serial No:6210, Year (2017)

Item 8: Boiler

CFB Boilers Gas Fired Boiler with CIB Unigas 'NG400' burner, 476Kg/hour, working pressure 1.0 Nmm² max Serial No: GL2602-30HP (2017) with buffer tank and water treatment Insulated & channel jacketed water heated tank 250mm top mounted vent:

- Units of Measurement
- 1x Wort transfer flowmeter to give local indication of flow and total for wort into the copper and wort leaving the Copper. The flowmeter is constructed from 316 stainless steel with 2.5" Tri-Clamp fittings. The electro-magnetic meter has no internal moving parts. The flowmeter is supplied with a separate display module mounted in the brew house control panel and capable of displaying:
 - Totals (resettable)
 - Flowrate
 - Accumulated Total
 - Units of Measurement
- 3x Local temperature Indicators for Liquor to Mash Tun and Cooled Wort
- 14x Temperature transmitters for:
 - Hot Liquor tank
 - Cold Liquor tank
 - Copper
 - Wort leaving the wort cooler

To prevent brewing odours and steam from discharging into the local atmosphere, a stainless steel copper condenser is installed to the top of the copper vent connection complete with safety valve, vent valve, anti-vac valve and internal spray device.



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